



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/687,686

10/17/2003

Len Diveglio

DIVEGLIO - 1

9351

25889

7590

11/08/2006

WILLIAM COLLARD  
COLLARD & ROE, P.C.  
1077 NORTHERN BOULEVARD  
ROSLYN, NY 11576

EXAMINER

YOO, JASSON H

ART UNIT

PAPER NUMBER

3714

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/687,686	Applicant(s) DIVEGLIO, LEN /	
	Examiner Jasson Yoo	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/17/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/17/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 15-16, 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Boland (US 5,921,896).

1. A device for training batters comprising:
  - a) a stand (18 in Fig. 1);
  - b) a housing coupled to said stand and extending substantially vertically up from said stand (10 in Fig. 1);
  - c) a plurality of lights disposed in said housing (106, 108, 110, 112, in Fig. 10 and 92 in Fig. 9, col. 9:47-50); and
  - d) at least one processor in electrical communication with said plurality of lights for controlling the turning on and off of each of said plurality of lights to indicate that a pitch has been thrown (col. 6:53-55).
2. The device as in claim 1, further comprising a power supply in communication with said processor (battery in Fig. 18).

3. The device as in claim 1, further comprising at least one switch in communication with said at least one processor and said plurality of lights for turning on and off at least one of said plurality of lights (cols. 7:8-30, 7:50 – 8:5)

4. The device as in claim 1, further comprising at least one sensor disposed in said housing and in communication with said at least one processor wherein said at least one sensor detects whether said housing has been struck by a bat (cols. 8:36-60, 11:11-15, 11:26-12:4).

5. The device as in claim 4, wherein said housing has a front surface facing a user (Fig. 10) and said least one sensor detects whether said front surface of said housing has been struck by a bat (cols. 8:36-60, 11:11-15, 11:26-12:4).

6. The device as in claim 5, wherein said at least one, sensor comprises a plurality of sensors positioned in different positions on said front surface of said housing, wherein said at least one sensor determines whether a particular region of said front surface of said housing has been struck (cols. 7:1-5, 8:36-60, 9:47-50).

7. The device as in claim 6, wherein each of said plurality of sensors are disposed adjacent to, and associated with at least one of said plurality of lights (Figs. 7, 9, 10, 11-13; cols 6:56-7:7, 11:27-12:8).

8. The device as in claim 1, wherein said housing has a front face which faces a user when the device is in use, and wherein said plurality of lights are positioned in an exposed manner in said housing such that when at least one of said plurality of lights is turned on, light from said at least one of said plurality of lights extends out of said front face so that a user has an indication of a pitch being thrown (Figs. 9 and 10, col. 5:38-54, ).

9. The device as in claim 8, further comprising at least one indicator, indicating different sections of said front face of said housing, wherein said at least one indicator indicates a strike zone for a user lights (106, 108, 110, 112 in Fig. 10).

10. The device as in claim 1, further comprising a connecting arm coupling said housing to said stand (arm 12 in Fig. 1).

11. The device as in claim 10, further comprising a hinge coupling said connecting arm to said stand (joint 20 and 22 in Fig. 4).

12. The device as in claim 11, further comprising a spring (shock absorber 24 in Fig. 4) for biasing said housing in an upright position (col. 4:61-64).

13. The device as in claim 12, further comprising a sensor in communication with said at least one processor for determining a force of impact on said housing by a user striking said housing with a bat (cols. 6:35-60, 7:50-85).

15. The device as in claim 1, further comprising a scoreboard coupled to said housing, said scoreboard being in communication with said at least one processor (160 in Fig. 10, col. 6:45-55).

16. The device as in claim 1, further comprising a memory unit in communication with said at least one processor, said memory unit for storing a set of instructions for said at least one processor (cols. 6:53-55, 7:50-8:6).

18. A device for training batters that is in communication with a power supply the device comprising:

- a stand (18 in Fig. 1);

- a connecting arm having a first end coupled to said stand and an oppositely spaced second end (arm 12 in Fig. 1);

- a hinge for coupling said first end of said connecting arm to said stand (joint 20 and 22 in Fig. 4);

- a housing coupled to said second end of said connecting arm (10 in Fig. 1);

- a plurality of lights disposed in said housing (106, 108, 110, 112, in Fig. 10 and 92 in Fig. 2, col. 9:47-50);

Art Unit: 3714

a plurality of switches disposed in said housing with at least one switch being associated with at least one light for selectively turning each of said plurality of lights on and off (cols. 7:55-56);

at least one processor in electrical communication with said plurality of switches for controlling the turning on and off of each of said plurality of lights to indicate that a pitch has been thrown (cols. 7:8-30, 7:50-8:5);

a plurality of sensors disposed in said stand, with at least one sensor being disposed in said stand adjacent to at least one of said plurality of lights and in communication with said at least one processor for indicating a particular region where said housing has been hit (cols. 7:1-5, 8:36-60, 9:47-50).

19. A device for training batters comprising:

a stand (18 in Fig. 1);

a housing coupled to said stand (10 in Fig. 1);

a plurality of lights disposed in said housing (106, 108, 110, 112, in Fig. 10 and 92 in Fig. 2, col. 9:47-50);

at least one processor in electrical communication with said plurality of lights for controlling the turning on and off of each of said plurality of lights to indicate that a pitch has been thrown (cols. 7:8-30, 7:50-8:5); and

a plurality of sensors disposed in said stand, with at least one sensor being disposed in said stand adjacent to at least one of said plurality of lights and in

communication with said at least one processor for indicating a particular region where said housing has been hit (cols. 7:1-5, 8:36-60, 9:47-50).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boland (US 5,921,896) in view of Wong (US 6,280,351).

Boland discloses the training device as discussed above. Boland further discloses a hinge (20, 22 in Fig. 1) coupling the arm (12 in Fig. 1) and stand (18) to provide movement in response to the housing being struck by a user (col. 4:60-67), and sensors determining the force applied to the housing (cols. 8:36-60, 11:11-15, 11:26-12:4). However, Boland fails to teach a sensor is coupled to the hinge to determine the force applied to the housing by the movement in the hinge in response to the housing being struck by a user. In an analogous art to training devices, Wong teaches a striking device (Fig. 1), wherein a force sensor (32 in Fig. 4, col. 4:1-11) is coupled to the hinge of the device (col. 3:15-17) to determine the force applied to the housing (80 in Fig. 1, col. 3:17-20) in response to movement in the hinge (col. 5:8-35, 5:66-12). The force sensor coupled to the hinge measures force applied to the housing; and thus allowing training device to measure the force of the user's strikes applied to the housing even if



Art Unit: 3714

the user misses the target. Boland's training device will also benefit from the sensor coupled to the hinge when measuring the precision of the user's hits, by comparing the force applied to the targets and the force applied to the housing. Therefore it would have been obvious to one in ordinary skilled in the art at the time the invention was made to modify Boland's training device, and incorporate Wong's force sensor coupled to the hinge, in order to determine the force applied to the housing component of the training device, thus measuring the precision of the user's hit.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boland (US 5,921,896) in view of Russell et al. (US 5,271,627).

Boland discloses the claimed invention as discussed above, but fails to teach at least one sensor comprises a piezoelectric sensor. However, in an analogous art, Russell discloses a gaming apparatus in which a player strikes a target when the target is activated by a light (see abstract). Russell further teaches the sensors to detect the player's movement are piezoelectric sensors (col. 8:35-36). Piezoelectric sensors are electromechanical systems that react on compressions, and are commonly used to detect pressure, acceleration, strain or force. Furthermore, Piezoelectric sensors are very rugged, and thereby making them durable and ideal for training devices that detects constant contact for the user. Therefore it would have been obvious to one in ordinary skilled in the art at the time the invention was made to modify Boland's training device, and incorporate Russell's piezoelectric sensors in order to provide durable sensors that detect pressure, acceleration and force from the user.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boland (US 5,921,896) in view of Tobin (US 4,749,184).

Boland discloses the claimed invention as discussed above, but fails to teach a plurality of wheels coupled to the stand for making the device portable. Nevertheless, it is notoriously well known in the art to incorporate wheels in any device for making the device portable. In an analogous art to training apparatus, Tobin discloses a striking training apparatus (Fig. 1) comprising a plurality of wheels coupled to the stand for making the device portable (38 in Fig. 1). The wheels are rotatably mounted onto the stand to facilitate moving and relocating the apparatus (col. 6:38-7:3). Therefore it would have been obvious to one in ordinary skilled in the art at the time the invention was made to modify Boland's training device, and incorporate Tobin's plurality of wheels in order to making the device portable.

### ***Conclusion***

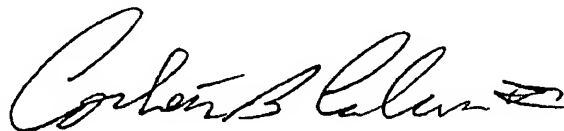
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasson Yoo whose telephone number is (571)272-5563. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olszewski Robert can be reached on (571)272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JHY

A handwritten signature in black ink, appearing to read "Corbett B. Coburn" with a stylized flourish at the end.

**CORBETT B. COBURN  
PRIMARY EXAMINER**